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[GB/GB]; UCL Cruciform Limited, Gower Street, London WC1E 6BT (GB).

(21) International Application Number:

PCT/GB2003/004296

(74) Agent: **HARRISON GODDARD FOOTE**; 31 St. Saviourgate, York YO1 8NQ (GB).

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(71) Applicants (*for all designated States except US*): **LUDWIG INSTITUTE FOR CANCER RESEARCH** [CH/CH]; Postfach, CH-8024 Zurich (CH). **GENOME RESEARCH LIMITED** [GB/GB]; The Wellcome Trust Sanger Institute, Hinxton, Cambridge CB10 1SA (GB). **UCL Cruciform Limited** [GB/GB]; Gower Street, London WC1E 6BT (GB).

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(72) Inventors; and

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(54) Title: POLYPEPTIDE

(57) Abstract: The invention relates to a polypeptide, or part thereof, which inhibits the apoptotic activity of the tumour suppressor protein p53 and including screening methods to identify agents which interfere with the activity of said polypeptide.

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(75) Inventors/Applicants (*for US only*): **JU, Xin [CN/GB];**

Ludwig Institute for Cancer Research, Imperial College School of Medicine at St Mary's, Norfolk Place, London W2 1PG (GB). **KUWABARA, Patricia** [US/GB]; Genome Research Limited, The Wellcome Trust Sanger Institute, Hinxton, Cambridge CB10 1SA (GB). **SELWOOD, David** [GB/GB]; UCL Cruciform Limited, Gower Street, London WC1E 6BT (GB).

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*[Continued on next page]*

(54) Title: **P53 BINDING POLYPEPTIDE**

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1 GCGGCCGCGT CGACCCGGCG TTCAGACGCG GGCAGCTACC GGGCCTCGCT GGGCTCCGCG
61 GGGCCGTCGG GCACCTTCG TCAGCAGCTGG CAGCCGCTCA GCGCCATCCC CATGGCCCCC
121 TCCAGCCCCC AGCCCCGGG GCGCCCGC CAGCGTCCCCA TCCCCCTCAG CATGATCTTC
181 AAGCTCCGAA AGCCCTTCGT GGAGCACGGG GCCAGCCGG CCATGCTCCC TGGGCCCCC
241 CTCTTCACCC GAGCCACCCCCC GGCTAACGCTG CAGGCCCCAA CACAACCCAA GCCCCAGCCA
301 CAATCACACAC CACAGCCCCA GCTGCCCAA CAGCCCCAGA CCAACCCCCA AACCCCTACC
361 CCAGCCCTCCC ACATCCGAT CCCAACAGA ATGGGCCCC TGTGIAACGAA GGACCCCCCA
421 AAACCCCCAAC CGAGCTGGAG CCTGAGCCGG AGATAGAGGG GCTCTGTGACA CCAGTGCTGG
481 AGGCTGGGGA TGTGGATGAA GGACCTCTGA GCAAGGCTCTC AGGCCCCAC GAGGGTGCAG
541 CCAGCACTGC CACCGGAGGC ACAGTGGGTG CCCCAGCTGG AGGGAGGTGG ACGGGTGTTG
601 GCGGGAACCCCTT CACCGGAGGC AGCTGGCTGG AGGAGGGCCC TGCTGTGGCC
661 CTGGCCCCCTA CCCAACAGAA ACAGTACCG AGCATCATCA GCGCCCTCT CCATCGTCAT
721 GGGGGGGCCAG GCCCCGGGGG CCGGGAGCCAG AGCTGGCTGG CATACTGAGG GGATCTGAAG
781 CCAGGGCAGG GCCCCCTGCT CCTGCCCCAC CAGCTCCCAT TCCACCGCCC GGGCCCTGCCC
841 CAGAGCAGGG CACCAAGAGC CCCGAGAGC ATGGAGATGG GCTCTGTGCT GCGGAAGGG
901 GGCTCCCCCGC CAAGGGGGG CCGGGGGCGC CTCAACCCCT TGTTGCTCTCT CCTGGACGGG
961 GCGCTGACGG GGGAGCTGG AGGTGGTCAG CAGGGCTGTA AGGAGATGAA CGACCCGAGC
1021 CAGCCCAACG AGGAGGGCAT CACTGGCTTG CACAAAGCC TCTGGGGCGC CAACTACTCT
1081 ATCTGGATT TCCCTCATGCC CGGGGGTCCC AAATGTCAACT CCCCCGACAG CCACGGCTGG
1141 ACACCCCTTG ACTGGGGCGC GTCTGTCACAC GACACATGCA TCTGCTATGCC GCTGGTGCAG
1201 CACGGGGCTG CAACTTCG CACCAAGCTC AGGGAGGGCC CCACCCGCCCTT CGAGAAAGTGC
1261 GACCCCTTACG CGGAGGGGTTA TGCTGACTGC GCCACCTACC TGGCAGACGT CGAGGAGAGT
1321 ATGGGGCTGA TGAACAGCGG CGGAGTGTAC GCTCTCTGGG ACTACAGCGC CGAGTTGGG
1381 GACGAGCTGT CCTTCCCGGA GGGCAGTGC GTCAAGCTGG TGGGGAGGGG CGGGCCGGAG
1441 GAGACCGCAT GGTGGGGGGG CGGGCTGAC AC GGGCAGAGG GCTACGTGCCC GCGGAACATAC
1501 TTGGGGCTGT TCCCCAGGGT GAAGCTCAA AGGAGTAAAG TCTAGCAGGA TAGAAGGAGG
1561 TTGCTGAGGC TGACAGAAC AAAGCATCTC GCCTTCCCTC CAGACCTCTC CTCCTGTTTT
1621 TTGCTGCTCT TATCTGCAC CCTCACCCCTG CTGGGGTGG TCTTGGCAC CGGTTCTCTG
1681 TTCTCCCTGGA AGTCCAGGGG AGAAGGAGGG CCCAGCTTAA ATTAAAGTAGA ATCTGCCTTA
1741 GCCTTGGGAG GTCTGGGAAG GGCTGAAAT CACTGGGGAC AGGAAACCCAT TCTCTTTGCA
1801 CAAATCAGAT CCCCTCCAA GTGCCCTCCA TGCTTACACAC CATCATACAA TCCCCCAGCA
1861 AGCCAGCCAC CTGCCAGCC GGGCCCTGGGA TGGGGCACCA CACCATGGA TATCCCTGG
1921 AGTCACTGCT GACACCATCT C'CC'CCAGAG TCTTGGGGTC TGGGGGGAA ACATTGGTCT
1981 CTACCAAGAT CCCGCCCA CCTCTCCCCA ATTAAGTGC TTCACACAGC ACTGGTTAA
2041 TGTTTATAAA CAAAATAGAG AAACCTGGTT AAATGTTATAA AAAAAAATAG AGAAACCTTC
2101 GCTTATAAAAT AAAAGTAGTT TGCAACAGAA TGAAAAAAA AAAAAAAA AAAAAA

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A. CLASSIFICATION OF SUBJECT MATTER  
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According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, SEQUENCE SEARCH, WPI Data, EMBASE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	SAMUELS-LEV YARDENA ET AL: "ASPP proteins specifically stimulate the apoptotic function of p53" MOLECULAR CELL, CELL PRESS, CAMBRIDGE, MA, US, vol. 8, no. 4, October 2001 (2001-10), pages 781-794, XP002202189 ISSN: 1097-2765 the whole document ---	1-54 -/-



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

## \* Special categories of cited documents:

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- \*P\* document published prior to the International filing date but later than the priority date claimed

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- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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- \*&\* document member of the same patent family

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Name and mailing address of the ISA

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## INTERNATIONAL SEARCH REPORT

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PCT/GB 03/04296

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	NAUMOVSKI L & CLEARY M L: "The p53-binding protein 53BP2 also interacts with Bcl2 and impedes cell cycle progression at G2/M" MOLECULAR BIOLOGY OF THE CELL, BETHESDA, MD, US, vol. 16, no. 7, 1 July 1996 (1996-07-01), pages 3884-3892, XP002095578 ISSN: 1059-1524 the whole document ---	1-54
X	IWABUCHI KUNIYOSHI ET AL: "Stimulation of p53-mediated transcriptional activation by the p53-binding proteins, 53BP1 and 53BP2" JOURNAL OF BIOLOGICAL CHEMISTRY, AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS, BALTIMORE, MD, US, vol. 273, no. 40, 2 October 1998 (1998-10-02), pages 26061-26068, XP002189291 ISSN: 0021-9258 the whole document ---	1-54
X	TAKADA NORIO ET AL: "RelA-associated inhibitor blocks transcription of human immunodeficiency virus type 1 by inhibiting NF-kappaB and Sp1 actions" JOURNAL OF VIROLOGY, vol. 76, no. 16, August 2002 (2002-08), pages 8019-8030, XP002285486 ISSN: 0022-538X the whole document ---	1-54
P,X	BERGAMASCHI DANIELE ET AL: "iASPP oncoprotein is a key inhibitor of p53 conserved from worm to human." NATURE GENETICS, vol. 33, no. 2, February 2003 (2003-02), pages 162-167, XP001180301 ISSN: 1061-4036 (ISSN print) the whole document ---	1-54
T	SLEE ELIZABETH A ET AL: "The ASPP family: Deciding between life and death after DNA damage." TOXICOLOGY LETTERS (SHANNON), vol. 139, no. 2-3, 4 April 2003 (2003-04-04), pages 81-87, XP002285487 ISSN: 0378-4274 ---	1-54
		-/-

## INTERNATIONAL SEARCH REPORT

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
T	DATABASE NCBI 'Online! human RelA associated inhibitor, 20 December 2003 (2003-12-20) TAKANA: "human RelA associated inhibitor blocks transcription of HIV" retrieved from EBI Database accession no. NP_006654 XP002285488 abstract ---	1-54
T	DATABASE NCBI 'Online! 21 November 2003 (2003-11-21) BERGAMASCHI: "iASPP oncoprotein is a key inhibitor of p53" retrieved from EBI Database accession no. NP_505955 XP002285489 abstract -----	1-54